



Shoptalk

A newsletter about dangerous waste and pollution prevention

Volume 22, No. 3, August 2012 – Publication Number 12-04-001c

Links related to all articles can be found on page 10.

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Announcements:

- **2012 Washington Small Business Fair September 29, 2012** Look for Ecology's booth at the 2012 BizFair at the Renton Technical College.
- **The National Institute of Standards and Technology (NIST) has launched a new Web site** to help your industry find an environmentally benign alternative to mercury thermometers.

Profitable Partnership: Accra-Fab and Lean and Environment, *Joanne Lind and Mariann Cook Andrews, Department of Ecology*

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Through a Lean and Environment project Accra-Fab not only reduced their amount of waste water, they're saving \$176,000 a year while doing it! They reaped many other benefits as well. You can too!

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Department of Ecology

Your business is liable for all dangerous wastes you generate. If you are uncertain about your responsibilities as a dangerous waste generator, call your nearest Ecology office and ask for a hazardous waste specialist. For more information on reducing or recycling dangerous waste, ask for the toxics reduction staff at:

Bellevue: (425) 649-7000
Lacey: (360) 407-6300
Yakima: (509) 575-2490
Spokane: (509) 329-3400

To ask about available formats for the visually impaired please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Shoptalk is produced by the Washington State Department of Ecology's Hazardous Waste and Toxics Reduction Program.

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3 Tips to Avoid Flood Problems, Mariann Cook Andrews, Department of Ecology

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Fall rains are right around the corner. Possible flooding has the potential to spread dangerous waste beyond your property. Business owners are liable for any contamination and cleanup caused by their dangerous materials. These three tips can help reduce your chances of releasing hazardous substances into the environment.

Get our Publications Online

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Recent budget cuts have reduced our ability to respond to requests for hard copies of our publications. Read the best way to still get what you need.

Coming Soon! Updated Dangerous Waste Management Tutorials, Mariann Cook Andrews, Washington State Department of Ecology

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We are revising and updating the online tutorials for dangerous waste management. Watch for them!

Profitable Partnership: Accra-Fab and Lean and Environment

The managers at Accra-Fab, Inc. had a problem. The company was spending too much staff time and money handling waste water from the metal treatment lines. So they called in the experts at Impact Washington and the Department of Ecology to hold a Lean and Environment project.

You can watch a video on Vimeo: *Accra-Fab – Lean & Green Manufacturing*. See page 10 for the Web link.

Their results? They:

- Are saving \$179,000 annually in avoided wastewater management and treatment costs.
- Reduced their weekly generation of acidic waste water from 1,500 gallons to 80 gallons.
- Reduced their chemical use by about 50 percent.
- Increased their production capacity with little additional capital investment.
- Freed up considerable floor space.

Accra-Fab provides high-quality precision custom metal fabrication and assembly for companies throughout the world. Managers at the 155,000 square foot facility in Liberty Lake, Washington identified a priority to reduce the amount of waste water the plant produces.

Accra-Fab brought in Impact Washington, the state manufacturing extension partner, which had helped them implement Lean manufacturing in 2008. Lean manufacturing techniques identify and eliminate wasteful and non-value added activities. Impact Washington partnered on the project with Ecology and Lean Environment, Inc. Lean Environmental is a small engineering firm with expertise in reducing waste water.

Accra-Fab began with a focused effort called a “kaizen event” to evaluate the conversion coating process and look for ways to reduce the generation of waste water. Specific factors included:

- Lack of adequate standard work.
- Solids and biological oxygen demand (BOD) content, and acidity or corrosivity (pH) of rinse system baths over time.
- Poor measurement of rinse bath conditions with the existing meter.
- Different operator’s techniques in handling parts and taking them out of the baths.

This pinpointed the main problem – relying on a single treatment system for numerous wastes. Lean Environment and Ecology helped the company redesign and refurbish the ion exchange system, improve process layout and environmental housekeeping, and update standard work.



Before: “The Swamp” was an uncovered waste collection pan downstream of the original “combined” system. A storage tank above supplied water by gravity feed.



After: Accra-Fab is now a much safer and greener company. The new ion exchange system eliminated “the swamp” and the raised storage tank, and opened up useful floor space.

For more information on this project, contact Tony Cooper, P.E. at 360-407-6338.

The Department of Ecology thanks the U.S. Environmental Protection Agency for funding support; Accra-Fab, Lean Environmental Inc., and Impact Washington for participating in this project; and the Pollution Prevention Resource Center and Ross & Associates for compiling the information.



Lean and Green Grants Available

Grant funding is available to reduce the costs of a “Lean and Green” project at certain types of manufacturers. These enhanced, Lean manufacturing projects can improve a manufacturer’s productivity, environmental performance, and competitiveness. Interested manufacturing facilities should **submit an email of interest by September 30, 2012.**

You could qualify for the funding if your plant generates over 10,000 pounds of dangerous waste (especially if the waste includes toxic metals such as: mercury, cadmium, chromium, or lead). The facility must want to reduce waste and improve efficiency.

Other facilities that have completed this program have saved an estimated \$100,000 - \$200,000 per year or more.

The Department of Ecology, Impact Washington, and Washington State University Extension Energy Program are offering a customized Lean and Green program to Washington manufacturers. The program uses Lean, energy efficiency, and environmental methods to identify and eliminate waste and non-value added activities.

“Our Lean experts guide you through a continuous improvement process that identifies and eliminates waste to allow you to transform your organization into a more highly efficient and profitable business,” said Soraya Dossa, Environmental and Energy Specialist at Impact Washington.

“It’s great to see the employee teams get so engaged and empowered by these Lean and Green projects. There’s lots of momentum to increase efficiencies and get operational, environmental, energy efficiency and financial benefits,” said Hugh O’Neill, Ecology Project Manager for the Lean and Green effort.

Funding is available to reduce Lean consulting fees by 50-80 percent. The total consulting fee charged to the company depends on the size of the project and potential environmental savings, and is typically \$6,000 to \$15,000. The funding comes from a grant from the U.S. Environmental Protection Agency. Additional technical assistance expertise is provided free of charge.

For more information, contact Soraya Dossa, Impact Washington, 425-835-2493 or Hugh O’Neill, Department of Ecology, 360-407-6354.

Painters and Mold Removers Gain from Creative Enforcement Settlement

A painting and mold remediation service facing an \$18,000 fine for mismanaging waste water worked with Ecology on a win-win solution for the environment and painting contractors statewide.

When an Ecology inspector responded to a complaint, she found that company employees had been Washington painting equipment and spraying rinse water onto the ground and to a storm culvert next to their building. The culvert eventually connects to a lake.



Federal regulations do not consider the latex-based paint product as hazardous. But the paint contains a mold-killing ingredient that is toxic to fish. That makes the paint sludge a dangerous waste under Washington State rules. Get more information on handling and disposing of paints and coatings from the link on page 10.

Ecology issued a penalty of \$18,000, which the company appealed. Through a settlement agreement, the company agreed to:

- Pay \$2,880 of the penalty over a period of two years.
- Switch to an alternate less-toxic product.
- Petition the paint manufacturer for more explicit labeling.
- Contact Washington State-area mold removal and painting contractors who are using the paint to inform them of its dangers.
- Notify a national network of mold remediation contractors, warning them of the potential dangers of working with the paint and petitioning them to switch to a less-toxic material.
- Create a Web site to raise awareness among mold remediation/painting contractors of the relevant environmental dangers and regulations. They are to report the site's use to Ecology.

3 Tips to Avoid Flood Problems

It may be dry outside today, but fall rains are right around the corner. And even on dry days, floods can happen from a broken pipe or a backed up retention pond. With floods come the potential to spread dangerous waste beyond your property.

Remember: business owners are liable for any contamination and cleanup caused by their dangerous materials.



Three Tips

1. Manage your chemical products and wastes to reduce your risks.

Staff from Ecology can advise you on ways to prepare for possible flooding. Some county agencies also offer this service. Call the Hazardous Waste and Toxics Reduction Program staff at your nearest Ecology regional office or your county's Health or Public Works department.

2. Do some housekeeping. Avoid stockpiling.

Get as much of your dangerous waste as possible off site before an emergency happens. Send it to a permitted treatment, storage, and disposal (TSD) facility. Some counties take small amounts of business waste at their moderate risk waste (MRW) facility.

3. Store hazardous materials properly.

Label all containers with up-to-date information. Keep them sealed and in good condition.

Get Our Publications Online

Recent budget cuts have reduced our ability to respond to requests for hard copies of our publications. The quickest way to get copies of our publications is to print them directly from the Web. Here's how you can do that.



1. Go to the Hazardous Waste and Toxics Reduction Program home-page.
2. Select "Publications" in the left hand column.



You will see this page. It lists publication according to the year they were released or update.

The screenshot shows the 'Publications & Forms' page of the Washington Department of Ecology. A red oval highlights the year selection bar, which includes years from 1990 to 2012. The year 2012 is selected. Below the bar is a table of publications for 2012.

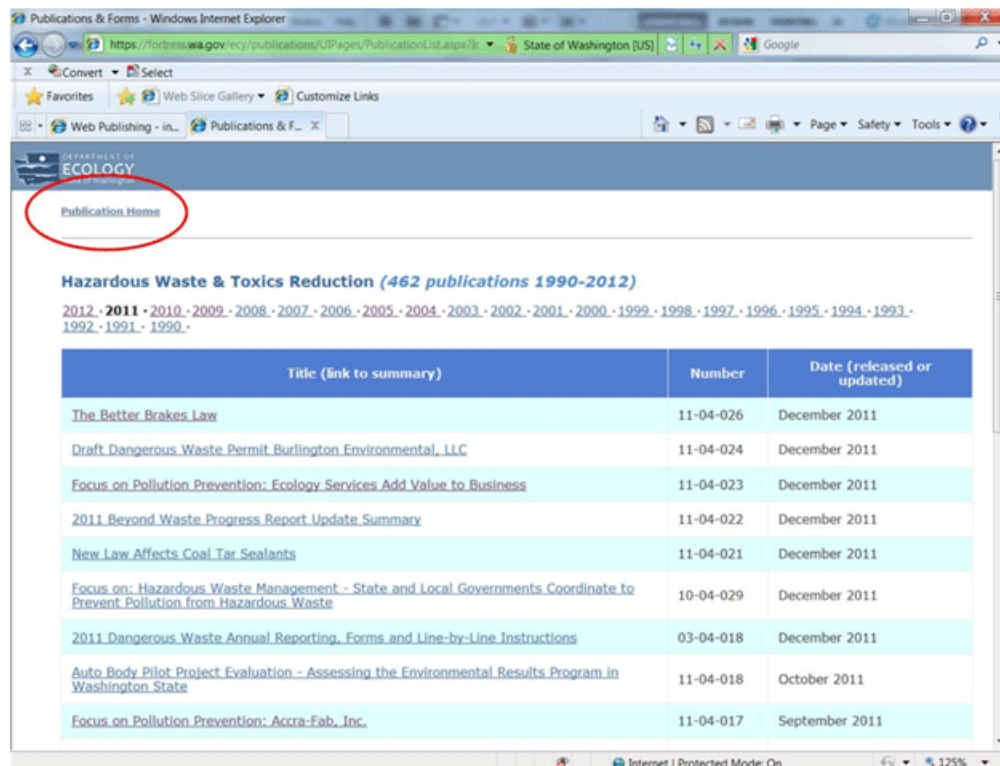
Title (link to summary)	Number	Date (released or updated)
The Better Brakes Rule Affects Brake Retailers, Distributors, and Installers	12-04-015	July 2012
The Better Brakes Rule Affects Brake Manufacturers	12-04-014	July 2012
Preliminary Cost-Benefit and Least Burdensome Alternative Analyses for the Better Brakes Rule	12-04-012	May 2012
Better Brakes Rule Proposal Notice	12-04-010	May 2012
Hazardous Waste Planning Fee - 2012	03-04-016	May 2012
One Family, One Box, One Hour	12-04-007	March 2012
Performance Partnership Agreement for Fiscal Year 2011	12-04-005	March 2012
Hazardous Waste and Toxics Reduction Program Plan 2011-2013	11-04-029	March 2012
Proposed Cleanup of Contaminated Soil for the South Side of Miller Hill and Former Skeet Range	12-04-002	February 2012

- If you know the year for the publication you want, select the year above the thick blue bar, and look at the publications listed. For 2011, that looks like this:

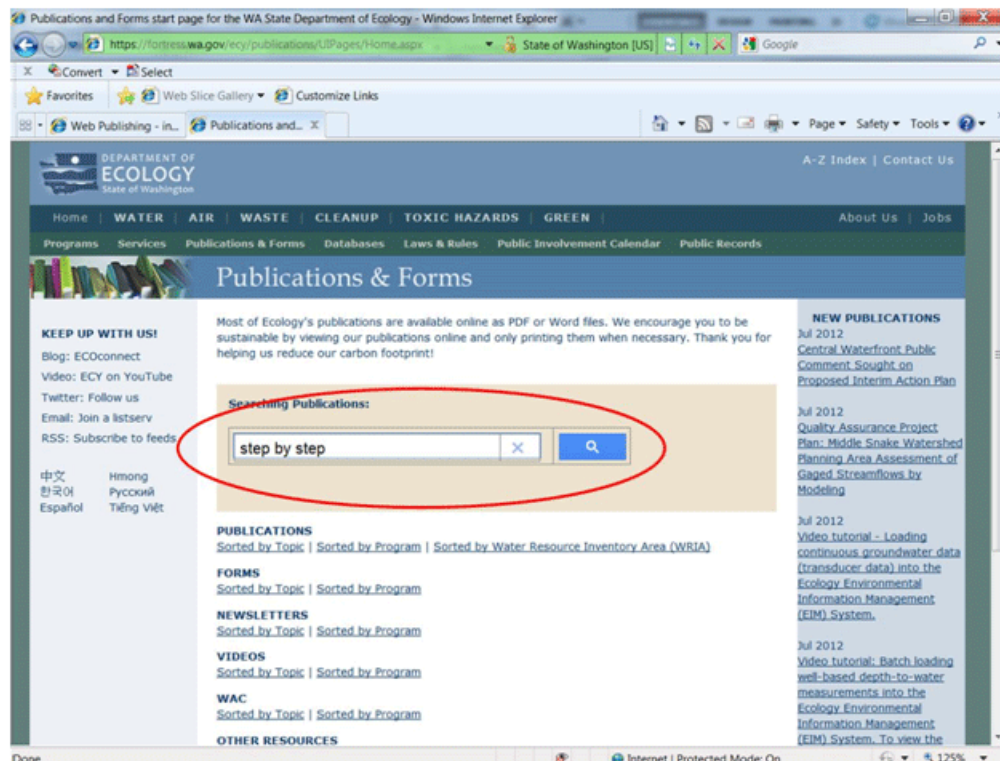
The screenshot shows the same 'Publications & Forms' page, but with the year 2011 selected in the year selection bar. The table below lists publications for 2011.

Title (link to summary)	Number	Date (released or updated)
The Better Brakes Law	11-04-026	December 2011
Draft Dangerous Waste Permit Burlington Environmental, LLC	11-04-024	December 2011
Focus on Pollution Prevention: Ecology Services Add Value to Business	11-04-023	December 2011
2011 Beyond Waste Progress Report Update Summary	11-04-022	December 2011
New Law Affects Coal Tar Sealants	11-04-021	December 2011
Focus on: Hazardous Waste Management - State and Local Governments Coordinate to Prevent Pollution from Hazardous Waste	10-04-029	December 2011
2011 Dangerous Waste Annual Reporting, Forms and Line-by-Line Instructions	03-04-018	December 2011
Auto Body Pilot Project Evaluation - Assessing the Environmental Results Program in Washington State	11-04-018	October 2011
Focus on Pollution Prevention: Accra-Fab, Inc.	11-04-017	September 2011

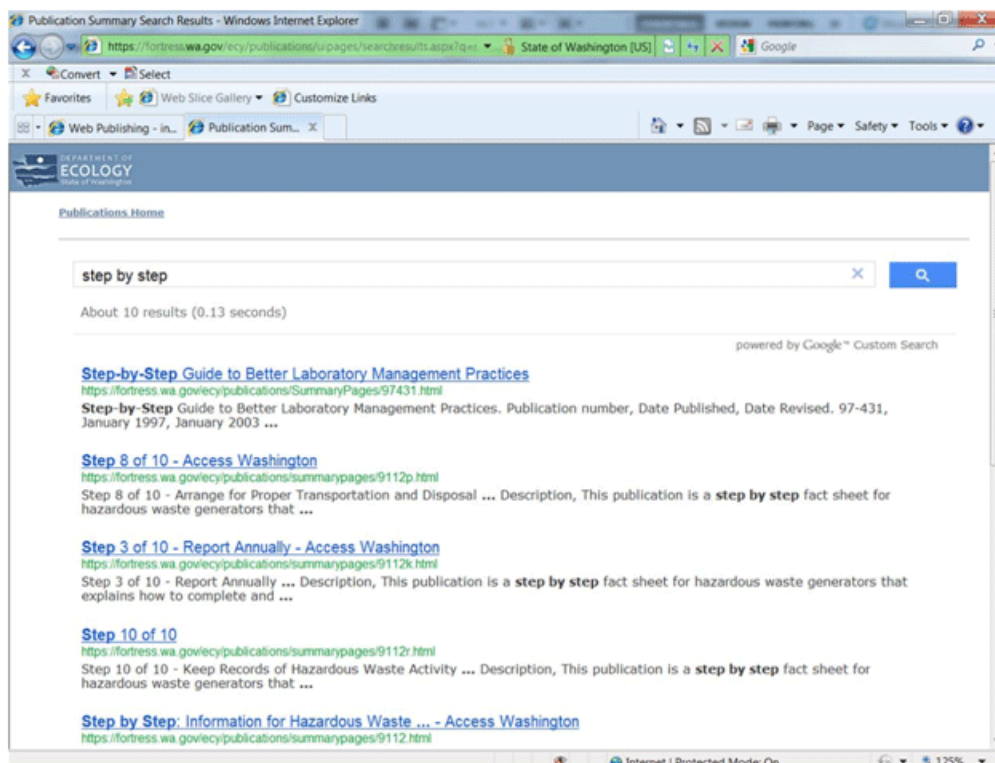
- If you don't know the year, you can also look for our publications through the Ecology-wide publications page. Select "Publications Home" above the title. That takes you to a page where you can search for a publication by name or publication number.



Say you are looking for the Step-by-Step Guide to Better Laboratory Management Practices. You enter the search phrase and select the magnifying glass.



5. You will then see a page listing the publications using the phrase “step by step,” where you can find a link to the publication you want.



We will only print limited new supplies of our publications. You can still request copies by email from our Web site or by phone at 360-407-6752. Please note that the *Dangerous Waste Regulations*, Chapter 173-303 WAC is too large to print from the Web, so feel free to contact us for a copy.

Coming Soon! Updated Dangerous Waste Management Tutorials

We are revising and updating the online tutorials for dangerous waste management. The revisions will:

- Clarify the steps in proper waste designation.
- Expand some explanations.
- Improve the “flow” of information.
- Use better graphics.

You will be able to view the tutorials as PowerPoint slideshows, read them in the Notes page format of PowerPoint, or read them in a portable document format (pdf). The links on the slides will be active in the slideshow but not in the Notes page format or pdf.



The notes accompanying each slide will provide the full explanation of the topic illustrated. When these become available, we suggest you read them first in the pdf format, then view the slideshow.

Links to Resources Mentioned in this Issue

Announcements

- **BizFair:** www.bizfair.org
- **Renton Technical College:** 3000 NE 4th Street, Renton, Washington
- **National Institute of Standards and Technology (NIST):** www.nist.gov/index.html
- **NIST Mercury Thermometer Alternatives Web site:** www.nist.gov/pml/mercury.cfm
- **NIST Tech Beat:** www.nist.gov/public_affairs/tech-beat/index.cfm

Profitable Partnership: Accra-Fab and Lean and Environment

- **Vimeo video, AccraFab – Lean & Green Manufacturing:** <http://vimeo.com/43681916>
- **Focus on Pollution Prevention: Accra-Fab, Inc.:**
<https://fortress.wa.gov/ecy/publications/SummaryPages/1104017.html>
- **Accra-Fab, Inc.:** <http://accrafab.com/facility/>
- **Impact Washington:** <http://impactwashington.org/>
- **Lean Environment, Inc.:** www.leanenvironment.com/
- **U.S. Environmental Protection Agency:** www.epa.gov/lean/
- **Ross & Associates Environmental Consulting, Ltd.:** www.ross-assoc.com/

Lean and Green Grants Available

- **Lean and Green Project:** www.ecy.wa.gov/programs/hwtr/lean/index.html
- **Toxics Metals Project:** www.ecy.wa.gov/programs/hwtr/P2/metals_project.html
- **Impact Washington:** <http://impactwashington.org/>
- **Washington State University Extension Energy Program:** www.energy.wsu.edu

Painters and Mold Removers Gain from Creative Enforcement Settlement

- **More information about handling and disposing of paints and coatings:**
www.ecy.wa.gov/programs/hwtr/business_type/painters.html
- **Environix Web site:** www.moldremediationcontractors.org

3 Tips to Avoid Flood Problems

- **Ecology Regional Offices:**

Northwest Regional Office
3190 160th Avenue SW
Bellevue WA 98008-5452
425-649-7000

Central Regional Office
15 West Yakima Avenue #200
Yakima WA 98902-3452
509-575-2490

Southwest Regional Office
PO Box 47775
Olympia WA 98504-7775
360-407-6300

Eastern Regional Office
4601 North Monroe
Spokane WA 99205-1295
509-329-3400

- **Department of Ecology:** www.ecy.wa.gov/programs/sea/floods/index.html
- **Hazardous Waste & Toxics Reduction Program:** www.ecy.wa.gov/programs/hwtr/Floods/index.html
- **WA Military Department, Emergency Management Division:** www.emd.wa.gov/hazards/haz_flood.shtml
- **Federal Emergency Management Agency:** www.ready.gov/floodawareness

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- **Hazardous Waste & Toxics Reduction Program:**
<https://fortress.wa.gov/ecy/publications/summarypages/hwtr.html>
- **Department of Ecology:** <https://fortress.wa.gov/ecy/publications/UIPages/Home.aspx>
- **Unstaffed publications office:** hwtrpubs@ecy.wa.gov or 360-407-6752